

Docket: AIRGAIN-7/PCT/US

**AN ANTENNA SYSTEM WITH A CONTROLLED DIRECTIONAL PATTERN, A
TRANSCIVER AND A NETWORK PORTABLE COMPUTER**

ABSTRACT OF THE INVENTION

[0062] The invention is related to antenna systems and transceiving equipment for network portable computers. The antenna system comprises a flat substrate (2), carrying at least two directional flat antennas oriented in a fan-like fashion (3), and a commutation switch (6) to control the directional pattern of the antenna system. The commutation switch is made so as to make it possible to switch on to one or two or more antennas simultaneously. The transceiving device comprises the antenna system (1), a reception/transmission switch (12), a transmitter (14), a receiver (16), an antenna system operation control unit (18) to control the operation of the antenna system in omnidirectional mode, directional scanning mode or stationary directional mode, and a controller (17). It can also be supplemented with a signal quality evaluation unit (20) and a signal identification unit (21). The network portable computer incorporates the transceiving device, the antenna system for which is fixed to the computer case by a hinge.